

IN THE CLAIMS

Please amend Claim 1, 9 and 10, to read as follows.

1. (Currently Amended) An ink jet recording head comprising:
 - a flat substrate having an end face and front and back flat main surfaces, said front and back flat main surfaces having a larger area as compared to the end face;
 - a discharge port that has an ink-discharge-side surface and that is formed above the front flat main surface of the substrate;
 - a wiring electrode connected to an energy generating member formed on the front flat main surface of the substrate, said energy generating member generating energy to be utilized to discharge ink from said discharge port;
 - a stepped surface provided at an end of the substrate and provided lower than the front flat main surface;
 - a connection electrode electrically connected to the wiring electrode and provided on the stepped surface;
 - an electrical wiring member superimposed on the connection electrode and electrically connected to the connection electrode through a bump electrode to supply an electrical signal or [[an]] electrical power to the connection electrode; and
 - a sealing member for electrically conductively sealing and covering the connection electrode, the bump electrode, and the electrical wiring member on the stepped surface,

wherein said sealing member does not extend ~~beyond~~ to the ink-discharge-side surface of said discharge port in such a manner that the connection electrode, the bump electrode and the electrical wiring member are vertically overlapped, and

~~wherein the bump electrode is located between the connection electrode and the electrical wiring member.~~

2. (Previously Presented) The ink jet recording head according to claim 1, wherein the substrate is an insulation substrate made of a single crystal Si material, and wherein a pattern on a surface of the substrate is formed by anisotropic etching.

3. (Previously Presented) The ink jet recording head according to claim 2, wherein said stepped surface is located in an area of the substrate that becomes thinner in a stepwise fashion in a vicinity of the end face.

4. (Previously Presented) The ink jet recording head according to claim 3, wherein a surface of said stepped surface is parallel with the front flat main surface of the substrate.

5. (Canceled)

6. (Canceled)

7. (Original) The ink jet recording head according to claim 1, wherein the energy generating member is an electrothermal converting element for generating thermal energy.

8. (Original) The ink jet recording head according to claim 1, wherein the discharge port is disposed so as to face the energy generating member.

9. (Currently Amended) An ink jet recording apparatus comprising:
an ink jet recording head having:

a flat substrate having an end face and front and back flat main surfaces,
said front and back flat main surfaces having a larger area as compared to the end face;

a discharge port that has an ink-discharge-side surface and that is formed
above the front flat main surface of the substrate;

a wiring electrode connected to an energy generating member formed on
the front flat main surface of the substrate, said energy generating member generating energy to
be utilized to discharge ink from said discharge port;

a stepped surface provided at an end of the substrate and provided lower
than the front flat main surface;

a connection electrode electrically connected to the wiring electrode and
provided on the stepped surface;

an electrical wiring member superimposed on the connection electrode and
electrically connected to the connection electrode through a bump electrode to supply an
electrical signal or [[an]] electrical power to the connection electrode;

a sealing member for electrically conductively sealing and covering the connection electrode, the bump electrode, and the electrical wiring member on the stepped surface,

wherein said sealing member does not extend ~~beyond to the ink-discharge-side surface of~~ said discharge port ~~in such a manner that the connection electrode, the bump electrode and the electrical wiring member are vertically overlapped, and~~

~~wherein the bump electrode is located between the connection electrode and the electrical wiring member; and~~

a member on which the ink jet recording head is mounted.

10. (Currently Amended) A method for sealing an electrode of an ink jet recording head, the ink jet recording head comprising a flat substrate, the flat substrate having an end face and front and back flat main surfaces, the front and back flat main surfaces having a larger area as compared to the end face, a discharge port that has an ink-discharge-side surface and that is formed above the front flat main surface of the substrate, the ink jet recording head further comprising a wiring electrode connected to an energy generating member formed on the front flat main surface of the substrate, said method comprising the steps of:

providing a stepped surface at an end of the substrate such that the stepped surface is lower than the front flat main surface;

providing, on the stepped surface, a connection electrode electrically connected to the wiring electrode;

providing an electrical wiring member superimposed on the connection electrode and electrically connected to the connection electrode through a bump electrode to supply an electrical signal or [[an]] electrical power to the connection electrode; and

electrically conductively sealing and covering, with a sealing member, the connection electrode, the bump electrode, and the electrical wiring member on the stepped surface,

wherein the sealing member does not extend ~~beyond to the ink-discharge-side surface of the discharge port in such a manner that the connection electrode, the bump electrode, and the electrical wiring member are vertically overlapped, and~~

~~wherein the bump electrode is located between the connection electrode and the electrical wiring member.~~